

Amendments to the Claims:

Claims 2, 3 and 5 are cancelled. Claims 1, 4 and 17 are amended and claims 19 and 20 are added as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A transponder arrangement for mounting in a tire defining an inner side whereat deformations and stresses occur during operational use of said tire, the transponder arrangement comprising:

5 a substrate;

said substrate being an unencapsulated substrate exposed directly to the atmosphere within said tire;

a transponder embedded in said substrate and including a transponder chip and an antenna;

10 a connecting structure disposed between said substrate and said inner side of said tire for connecting said substrate to said inner side and supporting said substrate in spaced relationship to said inner side;

15 said connecting structure being in the form of a soft or sliding cushion support made of a silicone layer; and,

said substrate being decoupled from said inner side by said connecting structure in such a manner that [[no]] none or only minimai a minimum of said deformations and mechanical stresses

20 coming from said inner side of said tire are transmitted to said substrate and said transponder embedded therein thereby considerably lengthening the service life of said transponder.

Claims 2 to 3 (Cancelled).

4. (Currently Amended) The transponder arrangement of claim 2, wherein A transponder arrangement for mounting in a tire defining an inner side whereat deformations and stresses occur during operational use of said tire, the transponder arrangement comprising:

5 a substrate;
 said substrate being an unencapsulated substrate exposed directly to the atmosphere within said tire;
 a transponder embedded in said substrate and including a transponder chip and an antenna;
 a connecting structure disposed between said substrate and said inner side of said tire for connecting said substrate to said inner side and supporting said substrate in spaced relationship to said inner side;
10 said connecting structure being a soft or sliding cushion support;
 said substrate being decoupled from said inner side by said connecting structure in such a manner that none or only a minimum of said deformations and mechanical stresses coming from said inner side of said tire are transmitted to said substrate and said transponder embedded therein thereby considerably lengthening the service life of said transponder; and,

said cushion support [[is]] being an air cushion, gel cushion or foam material cushion.

5. (Cancelled).

6. (Withdrawn) The transponder arrangement of claim 2, wherein said cushion support has a leg-like or strut-like structure.

7. (Withdrawn) The transponder arrangement of claim 2, further comprising a patch covering said substrate and said cushion support; and, said patch being connected to said inner side of said tire.

8. (Withdrawn) The transponder arrangement of claim 7, further comprising a partition medium arranged between said substrate and said inner side of said tire; and, said substrate being disposed on said partition medium so as to be slideably movable thereon.

9. (Withdrawn) The transponder arrangement of claim 7, further comprising partition means disposed between said substrate and said patch.

10. (Withdrawn) The transponder arrangement of claim 7, wherein said patch is permeable to air at at least one location.

11. (Withdrawn) The transponder arrangement of claim 7, wherein said patch has a cavity containing a fluid and said substrate is supported in said fluid.

12. (Withdrawn) The transponder arrangement of claim 1, wherein said connecting structure is defined by at least one connecting leg for connecting said substrate to said inner side of said tire.

13. (Withdrawn) The transponder arrangement of claim 12, further comprising a latch or snap connection for connecting said substrate to said connecting structure.

14. (Withdrawn) The transponder arrangement of claim 1, wherein said substrate has an arcuately-shaped housing contour adapted to said inner side of said tire.

15. (Withdrawn) The transponder arrangement of claim 1, further comprising a patch; said substrate being arranged in said patch; and, said patch being fixedly connected to said inner side of said tire only at one or several component regions.

16. (Withdrawn) The transponder arrangement of claim 1, further comprising a patch; and, a partition medium arranged between said patch and said inner side of said tire.

17. (Currently Amended) A tire comprising:

a tire wall having an inner side whereat deformations and stresses occur during operational use of said tire;

a transponder arrangement disposed [[is]] in said tire;

5 said transponder arrangement including:

a substrate;

said substrate being an unencapsulated substrate exposed directly to the atmosphere within said tire;

10 a transponder embedded in said substrate and including a transponder chip and an antenna;

 a connecting structure disposed between said substrate and said inner side of said tire for connecting said substrate to said inner side and supporting said substrate in spaced relationship to said inner side;

15 said connecting structure being in the form of a soft or sliding cushion support made of a silicone layer; and,

 said substrate being decoupled from said inner side by said connecting structure in such a manner that [[no]] none or only minimal a minimum of said deformations and mechanical stresses coming from said inner side of said tire are transmitted to said substrate and said transponder embedded therein thereby considerably lengthening the service life of said transponder.

18. (Withdrawn) The transponder arrangement of claim 2, wherein said cushion support is in the form of a tubular-shaped member having a lower annular edge connected to said inner side of said tire; and, said substrate has a peripheral edge and is held 5 within and by said tubular-shaped member in spaced relationship to said inner side of said tire.

19. (New) A transponder arrangement for mounting in a tire defining an inner side whereat deformations and stresses occur during operational use of said tire, the transponder arrangement comprising:

5 a substrate;
 said substrate being an unencapsulated substrate exposed
 directly to the atmosphere within said tire;
 a transponder embedded in said substrate and including a
 transponder chip and an antenna;
10 a connecting structure disposed between said substrate and
 said inner side of said tire for connecting said substrate to
 said inner side and supporting said substrate in spaced
 relationship to said inner side;
 said connecting structure being a soft or sliding cushion
15 support;
 said substrate being decoupled from said inner side by said
 connecting structure in such a manner that none or only a minimum
 of said deformations and mechanical stresses coming from said
 inner side of said tire are transmitted to said substrate and
20 said transponder embedded therein thereby considerably
 lengthening the service life of said transponder; and,
 said cushion support being a leg-like structure to provide
 increased decoupling between said transponder and said inner side
 of said tire.

20. (New) A transponder arrangement for mounting in a tire
defining an inner side whereat deformations and stresses occur
during operational use of said tire, the transponder arrangement
comprising:

5 a substrate;
 said substrate being an unencapsulated substrate exposed
 directly to the atmosphere within said tire;

a transponder embedded in said substrate and including a transponder chip and an antenna;

10 a connecting structure disposed between said substrate and said inner side of said tire for connecting said substrate to said inner side and supporting said substrate in spaced relationship to said inner side;

said connecting structure being a soft or sliding cushion
15 support made of a cellular rubber; and,

said substrate being decoupled from said inner side by said connecting structure in such a manner that none or only a minimum of said deformations and mechanical stresses coming from said inner side of said tire are transmitted to said substrate and
20 said transponder embedded therein thereby considerably lengthening the service life of said transponder.